

ENVIRONMENTAL ASSESSMENT PROGRAM

CHAPTER 1:

EXECUTIVE POLICY AND PROCEDURE

EAP POLICY 1-08

Resource Contact: Ecology Quality Assurance Officer

Reference: EAP SOP for Technical SOPs (Attachment 1)

Environmental Assessment Program Policy on Development, Adoption, Use, and Revision of Technical Standard Operating Procedures (SOPs)

Goal: To ensure major program technical activities are documented by SOPs. This policy will assure that SOPs are written to a standard format, archived in both electronic and hard-copy formats, and kept in a convenient location easily accessed by Program staff.

1. Definitions

EIM; Environmental Information Management System – This is an Ecology database that is a major repository for the Agency's environmental data

QAPP: Also known as a Quality Assurance Project Plan, it is a key planning document for projects producing environmental data

POLICY: A written expression of a management decision

PROCEDURE: Steps taken by program staff to accomplish an objective.

REFERENCE: Authority which dictates the policy's form, content, or scope.

RESOURCE CONTACT: The person most knowledgeable about the activity or procedure.

STANDARD OPERATING PROCEDURE: a document which describes in organized detail a standardized business activity of the Environmental Assessment Program.

2. Program SOPs Will Follow A Standard Format

The Ecology Quality Assurance Officer will retain a master copy of the approved format for SOPs and will be responsible for ensuring that all SOPs conform to that format. The approved format is documented in the SOP entitled "Standard Operating Procedure for the Documentation of Technical Standard Operating Procedures." This document is provided as an attachment to this policy. The actual template for technical SOPs can be found at:

x:\EA Program\ECYEAPSOP\SOP Template.dot

3. SOPs will be prepared for all technical activities

It is program policy that SOPs will be developed for all Program technical activities, including sampling and field measurement techniques. Additionally, technical activities such as data validation and verification, EIM data entry, and QAPP review (as examples), shall also have SOPs developed. The sections, in consultation with PMT, will decide which activities will have SOPs, and define the priority list for SOP development.

4. SOP use is mandatory

Once SOPs are developed for a defined business activity, their use is mandatory. Additionally, no deviations from the SOP are allowed, without timely Quality Assurance approval. For procedures that may involve decision trees or that may require flexibility in the field, the SOPs will be prepared to indicate the allowable range of decisions and/or options.

5. All EAP sections will develop SOPs for their important activities

SOPs are applicable to all Sections and Units of the Program. This includes Manchester Environmental Laboratory, Lab Accreditation Unit, Watershed Ecology Section, Environmental Monitoring and Trends Section, and Program Administrative Group. However, the immediate applicability of this policy is to the technical activities of the HQ sections of EAP (including Eastside operations staff). Additionally, the various units and sections will identify business processes that overlap or apply to several groups, and develop one SOP to meet the needs of all users.

6. SOP Development Process

Typically, the Program Management Team will identify processes for SOP development, and prioritize those SOP development processes. However, other agency staff, including Program Quality Assurance staff or the EA Program Manager may also identify processes requiring SOP development. The Quality Assurance Officer will maintain the master list of SOPs in development, and shall track progress for SOPs in development.

7. SOP Adoption Process

SOP adoption consists of a signature approval process. As per EPA SOP guidance, typical signatories will include:

- SOP author and/or editor
- SOP reviewer
- Agency QA Officer

If an SOP applies to more than one section, then signature approval may include all managers impacted by the SOP.

SOP status will be tracked. SOPs will be in one of four statuses, draft, provisional, final and archived. Draft status designates the SOP is being prepared, under revision or signature approval. Provisional status designates an SOP that has been through signature approval, but is being held pending comparison with other program SOPs on the same or similar subject areas. Final SOP status designates signature approval and SOP number assignment, and, when appropriate, posting on the internet. Archived status means the document has been removed from usage, and is stored as a historical record only.

8. SOP Revision Process

SOP revisions will occur as needed; primarily as processes change or new instrumentation is implemented. Revisions will go through the same adoption process as new SOPs.

9. SOP Archiving and Naming Conventions

SOPs will be archived in both electronic and hard-copy formats. Hard-copy archiving is detailed in Sections 10 and 11 of this policy. SOPs will be electronically archived on the x-drive at X:\ECYEAPSOP\. SOPs will be archived in both read-only .pdf and .doc formats. Use the SOP naming convention given below.

SOPs will be named in the following manner. Originating Agency-level organization i.e. ECY; then Agency Program i.e. EAP; then SOP; then SOP abbreviated title i.e. FreshWaterFecalColiformSampling; then version number i.e. v1_0. So in this case the full SOP name is -

ECY_EAP_SOP_FreshWaterFecalColiformSampling_v1_0

Use underscores to separate SOP naming elements. Use this SOP designation in the SOP footer.

SOPs will be numbered sequentially as they reach final approval. The Ecology Quality Assurance Officer will be responsible for numbering the

SOPs, which will be designated EAP###, where the number sign stands for a digit.

10. SOP Manual

The Agency Quality Assurance Officer shall maintain a master SOP manual which contains current versions of all HQ SOPs, and will post appropriate finalized SOPs to the Quality Assurance internet website. Approved or provisional SOPs having only internal Ecology usage will be posted on the EAP intranet site.

11. SOP Retention

SOPs are intended to be permanently linked to Program Project activities, i. e. "what happened when and where". Retention of all Program SOPs and revisions will be indefinite. Under no circumstances are approved SOPs or versions to be discarded or deleted.

Approved: _____

8/18/2006

William H. Backous, PE
Program Manager
Environmental Assessment Program
Department of Ecology

Date

Version 3 - 8/17/2006

Attachment 1 – SOP for Technical SOPs

Washington State Department of Ecology

Environmental Assessment Program

Standard Operating Procedure for the Documentation of Technical Standard Operating
Procedures

Version 1.4

Author –

Date -

Reviewer –Date -

QA Approval – William R Kammin, Ecology Quality Assurance Officer

Date –

EAP###

Please note that the Washington State Department of Ecology's Standard Operating Procedures (SOPs) are adapted from published methods, or developed by in-house technical experts. Their primary purpose is for internal Ecology use, although SOP's may have a wider utility. Our SOPs do not supplant official published methods. Distribution of these SOPs does not constitute an endorsement of a particular procedure or method.

Any reference to specific equipment, manufacturer, or supplies is for descriptive purposes only and does not constitute an endorsement of a particular product or service by the author or by the Department of Ecology.

Although Ecology follows the SOP in most instances, there may be instances in which Ecology uses an alternative methodology, procedure, or process

SOP Revision History

Revision Date	Rev number	Summary of changes	Sections	Reviser(s)
12/5/2005	1.0	Rewrite of Lab SOP for HQ use	all	Bill Kammin
1/4/2006	1.1	Added revision page, disclaimer page, safety language, reagent language	0.5 0.6 5.1 9.1	Bill Kammin
1/17/2006	1.2	Changed title to "technical" SOP; replaced admin/sampling with technical thru-out document	title	Bill Kammin
3/23/06	1.3	Removed P Brake as signatory	0	Bill Kammin
8/8/2006	1.4	Removed other signatures	0	Bill Kammin

Environmental Assessment Program

Standard Operating Procedure for the Production of Technical SOP's

0. SOP Format

- 0.1 The guidelines in this SOP will apply to all technical SOPs.
- 0.2 All Program SOP's will be prepared, approved and archived according to the EAP Policy on SOP Development and Use, which is currently under preparation.
- 0.3 The SOP will consist of a cover page, disclaimer page, revision history page, and the SOP body, which are specified in Sections 1-10.
- 0.4 The cover page will consist of organization headers, the title of the SOP, the name of the author, the date completed by the author, the names of the approvers/reviewers, and the dates of approval or review.
- 0.5 The disclaimer language page is always Page 2 of an SOP. The disclaimer language is derived from language used in Manchester Environmental Laboratory SOPs, and has been reviewed by the State Attorney General's office. See Page 2 of this document for the disclaimer language.
- 0.6 The revision history page contains a table with the following information:
- Date of revision approval
 - Revision number
 - Summary of changes
 - Sections revised
 - Revision author editor

Track minor editing changes in the decimal i. e. 1.1 to 1.2. Major SOP changes, such as the introduction of new sampling equipment, merit a change in the version number i. e. 1.2 to 2.0.

The revision history page will always be Page 3 of the SOP. Use Timer New Roman 10 as the font for the revision page.

- 0.7 All pages except the Title page will contain a footer with the following information: drive file location and file name, date of publication, the abbreviated title of the SOP, version number, and page number. See the page footer for this SOP for an example of appropriate page footer.

- 0.8 Use legal type outlining, i.e., 1.0, 1.1, 1.1.1, 1.1.2, ad infinitum. Use a non-indented outline format, as demonstrated in this SOP.
- 0.9 Use a Times New Roman 12 point boldface font for outline headers, and Times New Roman 12 point regular font for SOP body. Use Times New Roman 12 point regular font for all text on the title page. Use Times New Roman 8 point regular for the footer text.
- 0.10 Margins specifications
 - 0.10.1 Use a top and bottom margin of one inch.
 - 0.10.2 Use left and right margins of 0.8 inch. If less than 0.8 inch is used, holes punched in the hard copy will obliterate some text.
 - 0.10.3 Use normal rather than mirror margins, which could interfere with Acrobat conversion.
 - 0.10.4 Use a one-inch tab between the SOP text and the outline number.
 - 0.10.5 Print SOPs in double-sided format.
- 1. Purpose and Scope**
 - 1.1 This document is the Environmental Assessment Program (EAP) Standard Operating Procedure (SOP) for the preparation of technical SOP's.
 - 1.2 Expand on the description of the procedure name for the beginner or casual reader.
- 2. Applicability**
 - 2.1 Identify when the procedure is to be followed.
- 3. Definitions**
 - 3.1 Define any words, phrases, or acronyms having special meaning or application. Do not assume the reader has special knowledge of acronyms. Fully state all acronyms before further use.
- 4. Personnel Qualifications/Responsibilities**

4.1 Identify any special qualifications users must have such as certification or training experience.

4.2 List job class (es) to indicate typical level(s) performing the SOP.

5. Equipment, Reagents, and Supplies

5.1 Provide a list of all materials and equipment used in the procedure. Include descriptions of specialized equipment, sampling bottles, preservation reagents, and other items used in the technical process. For reagents, state final concentration, preparation techniques, and expiration dates. Include explicit descriptions of any health and safety concerns with reagents, including toxicity, carcinogenicity, and teratogenicity. Also include relevant Material Safety Data Sheets (MSDS) for any toxic materials handled in sampling or field activities.

6. Summary of Procedure

6.1 If the procedure is performed in several discrete steps, describe the steps or outline the procedure succinctly.

6.2 Provide a procedure flow chart if necessary or appropriate.

6.3 Attach example forms if necessary or appropriate. Label as attachments and number sequentially.

6.4 Use the active voice for describing step-by-step procedures. Using active voice is instructional; e.g.: "Add ____", "Dilute ____" or "Perform ____".

6.5 Acronyms: Write out all abbreviations the first time each is used.

6.5.1 e.g.: Manchester Environmental Laboratory (MEL), Hydrochloric acid (HCl).

6.6 Use Microsoft conventions for keyboard command typeface:

6.6.1 Use small font capital letters when spelling out the names of keys on the keyboard.

6.6.1.1 e.g.: "Press ENTER." "Press" is font size 12, while ENTER is font size 10.

6.6.2 Use capital letters and a plus sign (+) when pressing two keys simultaneously.

- 6.6.2.1 e.g.: "Press SHIFT+X."
- 6.6.3 Use **BOLD** text for words or characters that the user is to type. Use lowercase letters unless capital letters must be typed.
- 6.6.3.1 e.g.: "To change to the WORD directory, type **cd word**."
- 6.6.4 Use *italicized* text for specialized text and placeholder names.
- 6.6.4.1 e.g.: "Name the file using the parameter and today's date: *parameter/date*. Thus, a TKN analyzed on March 31, 1997, would be '**TKN033197**'."
- 6.7 Instruct the user to "Press keys"; not "Hit", "Punch", etc.
- 6.7.1 Instruct the user to "Press ENTER [or RETURN]" rather than instruct the user to "Enter" after typing in data.
- 6.7.2 Instruct the user to "Press ESC to escape" to exit a program, etc.
- 6.8 Mouse Conventions: "Click" means to press and then immediately release the mouse button without moving the mouse. "Double Click" means to press and release the mouse button twice in quick succession.
- 7. **Records Management**
- 7.1 Specifically list forms to be used and locations of files.
- 8. **Quality Control and Quality Assurance Section**
- 8.1 Describe any control steps and provisions for review or oversight prior to acceptance of the product or deliverable. This can include test plans such as verification and validation plans for software or running a "spell-check" program on the finished document.
- 9. **Safety**
- 9.1 Identify products, supplies, reagents, and activities that pose a safety hazard of any kind. Reference to EAP HQ Safety Manual when appropriate.
- 10. **References**
- 10.1 List references on which the procedure is based. Include references to all EAP safety documents.

